CHAL-0554

4 February 1959

MEMORANDUM FOR RECORD:

SUBJECT

1 Visit to Heller, Raymond and Brown, Inc. on 2 February 1959

- 1. On 2 February 1959, Haller, Raymond and Brown (ERB) was visited in order to inspect work being done on System VII.
- 2. Generally, the work appears to be progressing on schedule and HRB is optimistic about meeting performance specifications and capabilities. Operation of basic equipment was demonstrated in the Laboratory and indicated the following data. (This should not be considered as official ESO opinion since the tests set up were not reviewed in all detail).
 - a. -105 dbm sensitivity for equipment turn-on (this was somewhat below tangential sensitivity).
 - b. Complete sync separation at -96 to -97 dbm.
 - c. Dynamic range of approximately 50 db.
 - d. Simulated DEMBO signals would not adversely affect recorder turn-on or analysis until signal strength of -45 dbm was reached (at this point impreper operation was due to saturation of the receiver rather than to any faulty operation of the sync separator and turn-on circuits).
- 3. HRB was not taking specific action on a circuitry for utilization dual Ampex recorders but was planning to get this information from the Air Force which has utilized such a System in their STATE FAIR program.
- 4. No instructions or suggestions for change in contract work was made during the visit. The importance of delivering from the standpoints of specifications and schedule was stressed.
- 5. Since returning from HRB discussions have been held with Mr.

 which indicates that JFL tests of the crystal ball
 circuitry does not agree with results quoted above. Some elements of
 the HRB test, particularly as related to characteristics of the simulated
 signal, may not conform to actual signals to be intercepted. Effects

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of temperature change was not included in the HRB test and may be critical. Dynamic range as indicated by the JPL test also did not agree with HRB demonstration but may be a result of test conditions at JPL. The above points will be discussed with HRB at an early date.

ELINT Staff Officer

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